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OPERATIONAL RETRIEVAL, THE BASIC EDUCATION COMPONENT OF EXPERIMENTAL AND DEMONSTRATION PROJECTS (E/D) FOR DISADVANTAGED YOUTHS.

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DESCRIPTORS- *DISADVANTAGED YOUTH, *ADULT BASIC EDUCATION, *DEMONSTRATION PROJECTS, *EVALUATION, *EXPERIMENTAL PROGRAMS, PROGRAM DESCRIPTIONS, INSTRUCTIONAL MATERIALS, URBAN YOUTH, RURAL YOUTH, NEGROES, CAUCASIANS, ADUIOVISUAL AIDS, INSTRUCTIONAL STAFF, MOTIVATION, PROGRAM PLANNING, TEACHING TECHNIQUES, PROGRAMED MATERIALS, CLASS SIZE, EDUCATIONAL INNOVATION, EDUCATIONAL FACILITIES, NEW YORK CITY, CHICAGO, DETROIT, OREGON, CALIFORNIA,

IN THIS STUDY OF EXPERIMENTAL AND DEMONSTRATION BASIS EDUCATION PROJECTS FOR DISADVANTAGED YOUTHS, VISITS WERE MADE TO THE JOB UPGRADING PROJECT (NORTH RICHMOND, CALIFORNIA), THE MAYOR'S YOUTH EMPLOYMENT PROJECT (DETROIT), THE LANE COUNTY YOUTH PROJECT (EUGENE, OREGON), JOB OPPORTUNITIES, THROUGH BETTER SKILLS (CHICAGO), THE YMCA BEDFORD-STUYVESANT PROJECT (BROOKLYN), MOBILIZATION FOR YOUTH (MANHATTAN), AND PROJECTS IN SYRACUSE, NEW YORK, AND IN BOSTON. EXCEPT IN OREGON, NONWHITE URBAN MALES PREDOMINATED. THE MOST INNOVATIVE EFFORTS APPEARED IN INVOLVE NEW INSTRUCTIONAL MATERIALS, ATTEMPTS TO INDIVIDUALIZE INSTRUCTION, AND EFFORTS TO RELATE BASIC EDUCATION TO JOB SKILLS. THE PROJECT DIRECTORS WERE OF UNUSUALLY HIGH AND DISTINCTIVE QUALITY. ATTENTION TO TRAINEE HEALTH AND NUTRITION, ON THE JOB EDUCATION AND TRAINING (POSSIBLY WITH PAY), FLEXIBILITY IN PROGRAM PLANNING AND STAFF RECRUITMENT, CLEARER GOALS AND OBJECTIVES FOR BOTH TEACHERS AND TRAINEES, MUTUAL INSTRUCTION BY TRAINEES, CLOSER TEACHER TRAINEE RELATIONSHIPS, RESIDENTIAL CENTERS, INTEGRATION OF BASIC EDUCATION WITH OTHER FACETS OF TRAINEE DEVELOPMENT, AND IMPROVED INFORMATION EXCHANGE, COORDINATION, AND CONSULTATION WERE AMONG THE AREAS OF NEED. THE DOCUMENT INCLUDES A SUMMARY OF BASIC EDUCATION MATERIALS USED. (LY)

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Operational Retrieval

The Basic Education component of
Experimental and Demonstration Projects (E & D)
for Disadvantaged Youths

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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I INTRODUCTION

The Experimental and Demonstration Program may be described in the following quotations:

"The experimental and demonstration program (widely known as E&D) seeks to develop new ways to meet manpower problems. Its object is to learn and to teach by doing, to explore feasibility and to measure effectiveness of new approaches, to set examples which can be widely adopted to improve established manpower programs.

...

"In all, over 100 E&D projects were in effect at any point in 1965... Over half, about 55 percent, of these persons (40,000 trainees to late 1965) were disadvantaged youth, primarily in the large urban ghettos, but in some rural settings as well. ... Overall, about half of the participants in E&D projects have been nonwhite.[1]

The development of basic education in the MDTA program is described in the following:

"The marked transition which MDTA has undergone in the brief span of its existence is closely linked to a vast national need for basic literacy training for adults in the labor force. Those charged with channeling the unemployed to jobs and meeting skill shortages by means of occupational training under the 1962 Act quickly discovered that many of the unemployed were unsuited for this training. They had no foundation on which to build. Thus, and perhaps inevitably, under the statutory requirement of "reasonable expectation of employment" of trainees, the selection process screened out of the trainee group those most disadvantaged and most in need of help. Comparisons of characteristics data of early enrollees with characteristics of all unemployed clearly showed this tendency.

"Also, under the Experimental and Demonstration program which had to discover ways of aiding those who had been largely written off as untrainable and unemployable, it was early found that the ability to read easily, figure confidently, and take tests well are essential ingredients in the acquisition of work skills and jobs.

"Consequently, the Congress amended the MDTA in December 1963 to allow a frontal attack on the problem by making instruction in basic education "training within the meaning of this Act." An additional 20 weeks of training allowances were made available to eligible persons for basic education.[2]

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1 1966 Report of the Secretary of Labor on Manpower Research and Training under the MDTA, pp 35-36

2 "Basic Education in the MDTA Program", p.1, copy of a typed document received from OMPER

A policy statement was issued in February 1964 by the Department of Labor's Manpower Administrator to guide basic education under MDTA. Basic education was defined as "elementary education, usually in the general areas of reading, writing, language skills, and arithmetic". Such education was to be "oriented to the work habits usually expected by employers... and the development of constructive attitudes and motivations concerning self and work." The purpose of such education was to "provide each individual with training which will enable him to achieve whatever performance level in basic educational skills is commensurate with his general ability and aptitudes so long as it will qualify him to enter, progress in, and complete suitable occupational training within the time available under the Act."

Under the E & D program a battery of manpower techniques was used to reach disadvantaged youth, basic education being only one of them. Other parts of the program were: outreach, vocational assessment, counseling, pre-vocational, vocational training, job development and placement. Education was assumed to be an important part of this battery because of the poorly developed reading and computation skills found among trainees, and the meaning of education for the individual's job future.

E and D programs were often conducted outside the normal manpower and training agencies--in YMCA's, neighborhood centers, sheltered workshops and an array of private, non-profit counseling and training agencies.

While many of the trainees in the E & D youth projects were high school graduates, many of them performed poorly on basic education tests. The Chicago JOBS project, for example, in its initial effort, tested more than 1,500 youths and found that, while they had gone to school an average of ten years, they were able to read and calculate only at the sixth grade level. The Detroit project reported that nearly 85 percent of its 520 trainees were high school graduates, but their reading level was eighth grade.

The term "basic education" is defined in various ways, but it is customarily applied to training in reading, writing and computational skills up to the sixth, or in some cases the ninth, grade. For our purpose, however, we will broaden the scope of inquiry and include in our analysis all education in E & D projects that attempted to teach reading, writing, and computational skills, at whatever level. Two types of efforts were common to these projects: (1) the effort to teach the illiterate and semi-literate simple reading skills and, (2) the effort, at the other end of the continuum, to prepare students for high school equivalency and advanced job qualifying examinations. In between were scattered efforts to raise literacy levels among trainees. In some projects efforts were made to interest students in higher education and community colleges.

Type and source of data used: The data on which this analysis is based were derived from three principal sources: (1) review of reports submitted to the Department of Labor by E & D projects; (2) on-site visits to eight projects; (3) review of the reported progress and experiences of other types of projects (non E & D).

Projects visited were in North Richmond, California; Eugene, Oregon; Detroit, Michigan; Chicago, Illinois; Boston, Massachusetts; Syracuse, New York; and two in New York City -- Mobilization for Youth in Manhattan and the YMCA Bedford-Stuyvesant Youth and Work project in Brooklyn.

Limitation of the analysis: The principal limitation of the analysis in the absence of any formal means of evaluating the methods, materials and approaches of the various projects. Data produced by controlled experimentation were simply not available in any complete or useable form. Few efforts were made to test the effectiveness of specific methods and materials. In addition, much ambiguity existed about specific educational

goals, or the relation of these goals to job training and placement. Moreover, these projects have worked with different populations and labor markets and are, therefore, not always comparable. Projects worked with different age groups, sexes, and races; some populations were mainly hard-core and others were "creamed" groups. As a result, the various approaches used connot be judged with any scientific precision.

Nevertheless, a considerable body of knowledge was generated by those projects about the relative usefulness of various approaches to basic education. An examination of this experience can lead to some tentative conclusions as well as hypotheses for further experimentation and demonstration. When agreement is found among those who have worked closely with the projects about the success and failure of various approaches, such conclusions can legitimately be used as a guide to future programs.

Project reports, however, are often limited by the conflicting experiences of participants, and by the interruption of continuity of experience brought about by the great turnover of personnel on most projects.

An additional limitation of this analysis is that it is impossible to judge how much the basic education component contributed to what appeared to be the primary goal of the E & D projects, job placement. It is, for example, quite possible to have successful job placement without conducting any basic education at all. Similarly, it is possible to conduct an "ideal" basic education program and yet fail in job placement, or even in making trainees more employable.

It is important to note also, in reviewing project components, that the experiences of the past may not always be relevant to the future. Significant changes in the job market, such as occur during war years, require different approaches to job training. Programs which were suitable to

periods when jobs were scarce, and employers highly selective, may not be at all suitable during periods of extreme labor shortage. When labor is in short supply, lengthy institutional training in basic education and vocational skills may not be necessary or desirable. Youths may then enter suitable jobs without difficulty and may be up-graded either on the job or after working hours. Emphasis in training may then shift to on-the-job programs. JOBS NOW in Chicago is testing this hypothesis. Of course, large, but undetermined, numbers of unemployed but employable youth do still exist during times of acute labor shortage. The training programs required for these last-employed groups may differ significantly, however, from the programs of the past. Thus, the shift in many E & D projects from populations of deliquency-prone boys--many of whom find jobs during periods of labor shortage--to populations of young women with dependent families requires an entirely different approach to job training and basic education.

II SUMMARY OF NOTES ON PROJECTS VISITED

The following is simply a summary of the basic education activities of six of the eight E & D youth projects visited. All projects were engaged in providing educational and vocational training and job placement for trainees. Five of the projects were in large cities and these all dealt with dominantly or exclusively Negro populations. A tendency was found in these five to move away from the hard-core male toward instruction of young mothers with dependent children. Only the Oregon project dealt mainly with hard-core non-urban males, almost all of them white.

North Richmond, California: Job Upgrading Project Neighborhood House

Like many other projects, JUP began with a population of hard-core and delinquent youths, in one of the poorest and toughest communities in the San Francisco area, but because of changing job markets and preferences and decisions of community and staff, the project has increasingly taken on a population of more upwardly mobile females.

The project reports that basic education is successful only when related to particular civil service tests or job applications. About 25 percent of the time of instructional staff is spent on preparation for civil service exams and high school equivalency tests. All staff members seem agreed that preparation for specific exams has been the most successful part of the instructional program.

It is felt that an exam, such as the one used in New York State, providing the elementary school equivalent of the High School GED, is very much needed. For many trainees the GED is too difficult and remote to offer realistic educational incentives; for these an elementary or junior high school diploma would be more appropriate.

Tutorials in small groups were much more successful than traditional classrooms.

Since employers in the area often give GATB tests (used in personnel hiring), it was felt by some that trainees ought to be prepared for them. Others felt that such tests were too middle class and tended to alienate many trainees.

A simple dittoed two-page arithmetic test and a somewhat lengthier mimeographed reading test were devised by project staff for administration to entering trainees. Various mimeographed exercises for the GED and job exams were developed by project staff. Students interested in taking any of these tests worked on these exercises, submitting them to the instructor for review and guidance as they went along.

Education in small doses with small groups of three to six students was recommended. It was noted that these small groups were more productive then was a one-to-one relationship between teacher and student.

Teachers who developed significant relationships with trainees and used the peer group to advantage were able to teach skills and subject matter which trainees otherwise might have resisted. It was emphasized that developing a good personal relationship between instructor and students was essential to keeping students involved in class work, solving their learning problems, and counteracting fear of failure.

Many trainees were encouraged to enroll in regular adult education courses. A group of community workers were hired from among those completing the GED and other instructional programs, thus providing incentives to learning, and more highly trained community leaders.

The project found that in general the two biggest problems of trainees were: (1) low basic education skills; (2) low motivation and lack of confidence in their ability to get jobs and "fit in."

It was found that girls were much more willing than boys to go to school and accept tutoring. Boys tended to feel some "loss of face" in attending

classes. Many refused to sit around in the classrooms and devised many excuses for not doing so. The best instruction for boys, it was found, was a classroom setting as informal and as directly job centered as possible.

One key staff member reported that considerable conflict had existed between professional and non-professional staff, and that local people, working as non-professionals, were "screaming on the professionals" and had become hostile and negative toward both the trainees and the professionals.

A testing program was introduced because it was found that trainees could not perform well on jobs to which they were referred. The Gray reading test was used at first but a shorter project-devised test was later substituted.

Instructors used and liked the graded SRA and felt that it had good questions on reading comprehension and that it was both adult and simple. Reader Digest publications were also used, as was Shea's Working with Numbers.

Students complained about being in school without getting official credit for it. Students were reluctant to take home notebooks, texts or other materials that were visible to others, since codes of behavior among neighborhood youth discouraged any visable show of studiousness.

Detroit, Michigan
Mayor's Youth Employment Project

YEP was initiated by the Mayor of Detroit as a delinquency prevention program.

Complete physical examinations were given to all students and medical care was provided. A high incidence of high blood pressure and malnutrition was found. Nutritionists then taught trainees how to prepare balanced meals,

and milk was distributed instead of soft drinks. Eyeglasses were provided for those who needed them. It is believed that trainees had hitherto functioned at about 25 percent of physical capacity.

The project's philosophy includes: (1) close staff-student relations; (2) generation of a sense of identify with the program on the part of the student; (3) use of programmed and individualized instruction; (4) student choice and involvement wherever possible.

The intention was to keep the institutional unit small and create something rather more like a club than a classroom. Four units of 250 trainees, for example, were preferred to one unit of one thousand trainees. Despite poor facilities and equipment, the program reported good morale and close personal relations among participants.

Classes and materials used were presumably directly related to job training. In the first year, teachers served as work-education coordinators, teaching half the day and supervising vestibule training in public jobs the other half. In the second year these two functions were separated-- teacher and work coordinator-- and filled by different people. Since it was then more difficult for two people to form an intimate relationship with the trainees, this arrangement proved to be much less satisfactory. It also became more difficult for the basic education teacher to provide work-related instruction.

Instruction is conducted with a view to what employers want. Specific employers are contacted to discover what knowledge and skill they look for in employees, and efforts are made to meet these standards. Training in elementary math is provided for those wishing to qualify for the Great Lakes Steel hiring exam.

All shop classes now offer English instruction in connection with work

performed. Students learn by a combination of doing and reading. In the clerical course there is no teaching of grammar or formal English. Students are encouraged to read, write and speak, and to indulge in free, rather than assigned, reading.

In regular English courses, students are asked to write two pages each day, entries to be copied if the student wishes. Students who simply copied soon became bored and started to write their own entries. One student began to copy poetry and then turned to composing her own. The volume Look, See and Write, which asks students to write about what they see, was found to be useful and successful. The project education director is much impressed with the volume Hooked on Books. This volume outlines a program which involves youths in voluntary book reading. Among other things, students in the program choose paperback books, use a popular dictionary, and keep a regular journal with entries of two to five pages every week.

It is believed by project staff that "affective" learning is more important for trainees that "cognitive" learning, and that the second is possible only in the presence of the first. Learning is believed to depend on the formation of a significant relationship with an adult staff member. Successful job placement is believed to depend far more on the formation of such a relationship than on skills actually learned in training. Full staff meetings are held once a week for two or three hours at which time the progress of individual students is discussed.

It is felt, and repeatedly stated, that the race of teachers does not matter. It is by no means clear, from the experience of the project, that this is true, since it was pointed out that one of the most effective teachers is a very young Negro non-professional with whom students can very closely identify. In dealing with a virtually all-Negro student body it would seem highly desirable to have a sizeable Negro staff. This does not

suggest that Negroes be selected without respect to ability to perform; it does suggest that what may be artificial "qualifications" standards should not be used, in effect, to exclude Negroes, and that a balanced staff is to be preferred to a segregated one.

This project is now under the direct supervision of the city's anti-poverty organization. Further study is needed to determine whether such a dependent relation to another institution helps or hinders meaningful experimentation in E and D projects. Ideally, perhaps, the E and D effort should be autonomous. When it is part of a large organization, movement may be obstructed by inevitable bureaucratic rigidities or sluggishness. Forms must be filled out, supplies ordered long in advance, etc. Materials are misplaced or derailed to other parts of the program, and change may be difficult to introduce.

In the first year of this project, the public schools chose to play no role in its operation. After the first year's success, vocational education people in the schools persuaded the Board to take over the project. This resulted in the separation of teacher and work coordinator. It meant that the Board then supplied all teachers, selected on the basis of formal credentials, and it meant that supplies had to be ordered a semester in advance, as is customary in the schools. It was reported, however, that the schools were in general quite cooperative, and that they had adopted some of the E and D innovations.

The project's director feels that the choice of vocational education curriculum is made too early in the schools, and that all students should take a high school program in which many vocations are explored. He points out that Project Talent (University of Pittsburgh national study) discovered that 75 percent of all students changed their vocational goals one year after high school.

New York City
Mobilization for Youth

Most of the staff from MFY's original E & D program had left, so it was difficult to obtain information about past experiences.

After in-take trainees in the E & D program were assigned fifteen hours a week in either a work crew or sheltered workshop, along with fifteen hours in basic education. In the genesis of the E and D program, the education component was at first voluntary for trainees. This approach was not very successful. Pay for hours of school attendance was added and students began to attend classes. Then the education component was altered and the basic education was removed from the classroom and put on the work site. This apparently was more successful. Among the aims of this program were to develop new methods and materials for conducting basic education on the work site, and to test the efficacy of using crew chiefs as auxiliary teaching personnel. Unfortunately, none of the personnel who had worked on this program were still around to report on its success.

It is now felt at MFY that the greatest need of disadvantaged youth is for part-time jobs so that they can remain in school and work at the same time.

Growing to some extent out of the E & D experience, three operations in basic education are planned by a new education director of Mobilization: (1) a language workshop for non-English speaking trainees; (2) a communications skills workshop for those who can't read the lowest level of SRA; (3) a skills station which will use SRA materials about an hour each day; in math, Addison-Wesley materials will be used about two or three hours a week. Also to be developed is a community analysis curriculum beginning with the immediate neighborhood, making surveys of leadership, power, community needs, etc., then moving to other areas of the city.

Mobilization's Star Project, now in operation, trains parents of students in techniques of reading; this program is reported to have worked very well. The Mobilization tutorial program has also worked well.

Most trainees are at the 4th grade level in reading; in math, they are a little higher. When trainees enter the new program they will be sent to an education diagnostic center to take brief tests in reading, math and language. There will not be much connection between work and study in the program except in clerical, auto shop, etc. Other jobs, it is claimed, are too menial to require language skills. It is reported that trainees in the program now like school better than they like work.

Some conflict between teachers and counselors has developed because teachers have tried to do "too much counseling". Eight of the ten teachers are women; all are college graduates; a few are certified. None are specialists in remedial or language instruction. The project hopes to use local men as teacher-aides.

It is reported that Mobilization education projects have had little effect on the schools. In general, the schools have not followed through on successful projects.

Eugene, Oregon
Lane County Youth Project

Unique among projects visited, the Lane County trainees were almost exclusively white and rural. Sixty percent of those enrolled in basic education classes were reading at the 9th grade level or above. In general the basic education experiences were not satisfactory in the first year of the program. Many trainees did not need it and those who did, resisted attending classes. Some preparation was given for the GED.

One of the most promising experiments was with the use of volunteer tutors from the University of Oregon. These met with trainees on a one-to-one basis, at their training site, and worked on remediation in reading and arithmetic, using materials related to the specific training being given.

The project quickly abandoned its original highly structured program, with highly specified activities and scheduling, in favor of a looser program dealing with pre-vocational needs of most of the trainees. It was felt that the program had to be more closely adapted to the real needs and interests of trainees and that trainees had to be more involved in the planning and operation of the program.

The project had no control over the basic education component. The public schools operated it. Remedial programs were structured in the traditional way and classes could not be started without 15 or 20 people. Teachers were not able to work with alienated youth who did not like school. Suitable materials were not used. Teacher aides were used. Teachers worked out a schedule with the aide each day. Students responded very differently after being aides. They came to sense some ability to influence events and make decisions. Better training is required for the aides. It is felt that they need to be trained in specific skills such as typing, machine operation, etc., instead of simply discussing problems with them.

The project come to see some 60 percent of the trainees as alienated from both peers and adults. It was felt that these students needed more than anything else experience with success. It is also felt that more residential facilities are needed.

The most successful teacher was said to be a vocational education instructor. He was not a college graduate. He identified with trainees and was quick to verbalize aggression. The final examination he gave was to require trainees to put all the parts of a small gas engine in a box

and then reassemble all the parts. In general it was felt that the harder the task for the trainee, and the more real it was, the better it worked out. Trainees like to do hard work, especially when it meant using machinery; they wanted to learn by doing and would read <u>after</u> they had done something, or <u>in order</u> to do something.

Chicago, Illinois
Job Opportunities through Better Skills

JOBS emphasized the strength of the innovative process itself, and actively encouraged staff to be experimental. JOBS I provided, in its first phase, six weeks of basic education before moving trainees into vocational areas. It was found much easier to keep trainee attention when education was related to specific vocational training.

Almost all teachers were from the public schools. It was felt that successful instruction depended on the teachers caring greatly about individual trainees. Most teachers, it was reported, performed well and were interested in trainees, not just as students, but as human beings. Serious status conflict existed between instructors and counselors.

In testing trainees, the high school Essential Content battery was administered in three units to determine achievement levels, and the revised Beta IQ tests and Stanford Intermediate Achievement Test Battery in reading and arithmetic were used for all students. Trainees tested below the 6th grade levels in both reading and arithmetic. The Language Maser of Bell and Howell (a record play-back machine for remediation of oral language) and the Educational Development Laboratories (EDL) programs were used. Both were reported to be successful. The EDL filmstrips were introduced late in the program and it was found to be most effective when teachers maintained direct personal rapport with students and when

not too much solitary written work was required.

The major elements of the JOBS II program are: teachers are at the center of the program and aides peripheral, ingenuity is valued and teachers are asked to change old methods and all that reminds trainees of the public school atmosphere. Trainee participation in planning methods and materials of instruction is encouraged. Guidance is given to teachers by a director of curriculum.

Because basic education in the JOBS I program trumed out to be too traditional, it was decided to conduct experiments with five different approaches: (1) work with oral language; (2) work with games and problem solving; (3) reading or textual approach; (4) EDL Approach (Educational Development Laboratories' programmed material, the Tach-X and Skill Builder projective machines); (5) Vocational units, using a variety of approaches and attempting to bring education and vocational training together. It appeared that a combination of the oral and problem-solving approaches offered the best basic education for trainees; these were approaches in which the trainee actively participated in the learning process.

The SRA reading series was used, but it was found that trainees easily became bored with it.

One highly successful reading program was a novel reading class in which trainees read books of their choice on Negro literature, current affairs, etc. Experience in this program indicated that trainees were not really hostile to reading, only to traditional reading instruction. Non-professional group workers served in the classroom as aides, tutored in class and out, replaced the teacher during absences, and formed close relationships with students. The program began with a platoon system,

then changed to self-contained classrooms with an marked improvement in trainee morale. Again, trainees were able to relate to one person in the self-contained room. In solving reading problems, a linguistic approach appeared to be most successful.

New York City
YMCA Bedford-Stuyvesant Project

Perhaps the most innovative elements of this project were: (1) the development of programmed materials with the assistance of Basic Systems, Inc.; (2) the development of the Life Skills Educator concept, combining the roles of basic education teacher and counselor.

The project was part of a research program conducted by the New York State Division for Youth. All trainees had to be high school dropouts age 16-18. Control and experimental groups were randomly selected from the total group recruited. Detailed information was collected at intake, and follow-up studies at one and two year intervals were planned.

Development of programs was preceded by a thorough testing program to determine the learning needs of trainees. Programs were prepared in Auto Mechanics, Machine Shop Practice, Remedial Math and Remedial Reading. The program in Remedial Reading, for example, comprised 16 books, including volumes on how to read, using the dictionary, pronunciation, work usage, sentence and work structure.

The project began operations in July, 1962. Fourteen training cycles of four months each were completed by the end of 1966. Screening tests for admission to the program included the Gates Reading Survey, the Woody-McCall Test of Mixed Fundamentals in Arithmetic, and the Wechsler Adult Intelligence Scale. Though trainees typically had nine, ten, or eleven grade of school, reading scores ranged from the 4th to 8th grades, with a median at the 6th grade. They were even less advanced in arithmetic.

It was suggested that the Metropolitan Achievement Test might provide the most relevant data and norms. Other tests used as diagnostic instruments during the course of the program were Gray Oral Reading Paragraphs, Gates McKillop Reading Diagnostic Tests. Many detailed conclusions were drawn about the reading and oral language problems of trainees based on these test results.

When the project started in 1962, it operated in a rather traditional way. High school teachers were used on a part-time basis, and basic education came late in the day, after regular school hours. Teachers. come to the program after a full day of work; they were not close to the program or aware of specific needs of trainees or what they were doing. They were not part of the program. In general students were negative to basic education and felt they didn't need it. A further problem developed when the Basic Systems programmed instruction was introduced: teachers did not want to use it.

After about a year, these regular teachers left the program, and it was decided to use counselors as instructors. The counselor spent eight hours a day with students (in the shop helping the instructor, as a counselor, as a basic education teacher, and in recreation). It became clear that to integrate shop and basic education instruction, it was necessary for counselors to work in the shop so that the shop content could be carried over to remediation. This person came to be known as a "life skills educator". Later, aides were used from the National Committee on Employment of Youth. The aides were semi-professionals and offered individual attention to trainees. The aides were usually local people with high school diplomas and social work aspirations. The aide program

worked out very satisfactorily.

Since 1965 remedial courses have been conducted at the beginning of each day followed by shop work in the trade courses. In about one of every three trade classes, programmed units were used. When trainees were finished with their programmed assignment, they began shop work.

The major problem in using the programmed materials was that instructors relied to exclusively on them. When much of the original excitement wore off, materials could not be used to sustain the whole remedial program. Supplementary activities and materials were needed. Moreover, it was found that materials reached only about 50 percent of trainees. They were suitable for 4th, 5th, and 6th grade reading levels and were designed to bring trainees up to the 7th and 8th grade levels of performance. About 25 percent of all trainees were too retarded, and about 25 percent too advanced to use the materials. It was felt that the lower group needed more individual and personal attention and the upper gorup needed more enrichment, free reading, etc.; a combination of individual and small group programmed instruction was preferred.

There were also serious problems of cheating on the programs. Students would look at the answers and self-pacing was difficult. The use of programming also had some unanticipated effects on other parts of the schedule. Staff was not prepared, for example, to deal with students who finished very quickly and had nothing to do.

Basic education was regarded by staff as the most important part of the whole program. It was felt that reading and arithmetic had low status with male trainees and that a masculine identification was made with trade subjects; hence the effort to integrate basic education and trade subjects.

A major outcome of Youth and Work is a new program called TRY (Training Resources for Youth) which is funded with $4.3 million from three sources (Labor, HEW, OEO). TRY is more comprehensive than Youth and Work and will train 600 youth annually. Twenty percent of the trainees will live in brown-stones in the area. Vocational training programs will be sub-contracted to Philco and Brass Rail who will provide the heavy training equipment, the staff, curriculum, program, and will do job placing after the training period in their own organizations. Central to the Project's design is a major developmental effort--a Life Skills curriculum with basic education materials organized to provide information on the major life problems faced by the trainees.

III RETRIEVAL OF PROJECT EXPERIENCE

The following is an attempt to codify and summarize the more significant experiences of Youth E & D Projects in basic education:

Among the important elements of basic education are:

1. goals and objectives
2. teaching staff
3. student population
4. methods and subject matter of instruction
5. materials of instruction
6. incentives, motivations, rewards
7. class size: individual, small group, large group
8. physical setting: type and quality of buildings and classrooms
9. time: including duration of project, length of time spent on the education component and the time scheduling of education
10. coordination and structure
11. communications
12. impact on educational institutions

The most innovative efforts in basic education seem to have included, in some projects, (1) the development of new instructional materials; (2) the attempt to individualize instruction; (3) the effort to relate basic education to job skills. On the whole, it was my impression that relatively little major innovation was undertaken in basic education by these projects. Perhaps what was most innovative, however, was the effort to include <u>any</u> education in such work training programs. Almost all projects found traditional classroom instruction unsatisfactory and tried to develop better approaches.

Very striking to this observer was the unusually high and distinctive

quality of all the directors under which these programs operated. Most were of a type, age, background, and disposition rarely found among school administrators, and all seemed flexible and eager to encourage innovation. Often restrictions and limits build into the program tended to limit significant innovation. Built on past experiences, some of the projects are moving into new and perhaps more rewarding areas of innovation.

Projects aimed at different goals. If improvement on achievement tests is one criteria of goal achievement, basic education was not a notable success. Most projects claimed improvement in basic skills of about 1.5 grades over the time spent in the program. Since the standard error on many tests used is 1.3 grades, and since some projects had a rather heavy dropout among low-achievers, this gain may not be large.

Goals and Objectives

Many, if not all, of the projects seemed handicapped by lack of clarity about goals and objectives on the part of both staff and students.

Considerable confusion existed among staff about which project components had priority. While student goals were almost invariably good job placement (some trainees, of course, simply wanted more education), staff goals tended to vary according to the field of expert knowledge. Counselors tended to think of the project's goal as being "rehabilitation" of students; teachers felt that instruction in basic skills was the primary objective; vocational teachers that job performance was of primary importance.

Evan among basic education teachers, goals were not carefully spelled out. Some wanted to help students do better on specific skills exams; some wanted to "interest" students in reading and learning; some wanted to help them perform better on their jobs and qualify for better jobs; some thought education meant "broadening horizons"; and some felt that

education is what the work book requires you to do. Yet the measure most commonly used of advancement toward educational goals was often limited to performance on achievement tests. If this is to be the only measure of success, than efforts should be made to establish this as the primary goal of basic education. If it is not to be the exclusive goal, then careful definitions should be made of other goals and measurements devised to test achievement.

When goals are not clearly stated, where they are contradictory or ambiguous, or where they are too long term for immediate meaning--motivation often lags and stimulation is lacking for progress toward clear objectives. If job placement or upgrading is the trainee's primary goal, then it would seem that the most effective counseling, education and training would be likely to occur <u>on the job</u>, where the trainee can see immediate goals before him and where some of his needs are being satisfied.

In many, if not all projects--especially where students are <u>not</u> being paid to attend--students often insisted that they were there to get jobs, and not to go to school, or play around, or indulge in bull-sessions with counselors and other students. As a result, many students openly, or more often covertly, resisted instruction.

Teachers

Perhaps the most essential ingredients of education are: motivation, materials of instruction, and quality of teachers. Under the circumstances in which these projects operation, and given our present scanty understanding of how best to educate the disadvantaged, perhaps the most basic of these elements is the quality of teaching staff. Indeed, if quality is

high, it can generate the other two ingredients--both good materials and motivation in students.

In projects observed, a major obstacle to innovation in the use of teaching staff, in both basic and vocational education, was the influence of state vocational education departments and local school systems. In most cases, these groups required that teachers be selected from among certified professionals. In some projects the basic education component was actually run by local boards of education. Such influences limited innovation (if not performance) in the use of teachers, and constricted the pool from which staff might be drawn.

In most cases, project directors took no special exception to the hiring of certified professionals and were reasonably satisfied with the teachers they hired. In other cases, projects made efforts to circumvent certification requirements. When the New York YMCA project, for example, found regular high school teachers unsatisfactory, they used counselors as teachers. This switch was apparently made without objection by certification agencies. (In this project, also, tradesmen were used in vocational training.)

Though teacher aides and other non-professionals were employed in some projects, in no cases did they seem to be used in regular instruction except as tutors. Nowhere in the projects visited were "indigenous" people, either adults or the students themselves, used as teachers.* Experience in the "non-professional movement" might indicate that the use of local people migh be a productive area of innovation in basic education. Using such resources serves the double purpose of educating both teacher and student.

Among the soundest axioms in education is, "the only way to learn

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* In several projects, not visited, (NAY and NCCY), sub-professionals were used for instruction.

something is to teach it;" virtually every teacher has discovered that previously obscure material comes to life and is clarified by the necessity to instruct others in it. Yet rarely were more qualified students used in these projects, on a regular basis, to instruct the less qualified, as a supplement to other instruction. Instead, a large gulf often existed between teacher and student, created by differences in age, speech, experience, and attitudes. School personnel and classrooms were often simply moved to a different locale and given different rules; these were too often the same personnel and almost the same rules that had already failed with many of the trainees.

In some cases volunteers, recruited from among middle-class college students, housewives and similar sources, were used successfully as tutors for individual students; in general the projects did not seem to know how to make best use of these volunteers, though they were pleased with the work done.

Based on reported experineces, it was not possible to describe characteristics of good and poor teachers. It was generally agreed, however, that the most successful teachers excelled in "human relations" and were warm, friendly and informal with students, while at the same time expecting high levels of performance from them and setting reasonable limits on their behavior. <u>In all projects it was reported that the essential need of trainees was for a close personal relationship with the teacher or other staff person</u>.

It was generally felt that it was preferable for the most--but not all--students to have only <u>one</u> staff person to deal with and form a relationship. In some projects it was felt that the counselor could best fill this role

and could, under ideal circumstances, serve as basic skills teacher, aide in vocational skills classes, counselor, and job adviser. In the New York YMCA Project such a person, a "life skills teacher", was used to perform several of these roles.

As for other characteristics of successful teachers, no clear guidelines can be retrieved. Several projects reported that younger teachers were more successful than older ones. In one project it was said that young girls with dresses low at the top and high at the bottom were most likely to improve attendance and attention in class. In another project, in a Negro area, it was reported that the most successful teacher was an older white man from the South with no previous teaching experience--a man who cared and who understood his students, qualities which appear commonly in good teachers. Crew chiefs and skilled workmen were often found to have good rapport with trainees and were generally successful in winning their respect. Unfortunately, these men rarely engage in basic education.

Most projects reported that a racial mixture was most desirable in teaching staff. It was my impression that too frequently whites predominated in teaching staffs and other leadership roles, while minority group staff was present either in token numbers or in secondary roles. In one project, a large summer teaching staff recruited from among college students was entirely white, while students were entirely Negro.

While counselors were used to teach basic education skills in one project, in none of them were skilled workers, crew chiefs, or vocational education teachers used for this purpose. Many skilled workers and crew chiefs are highly literate and, given suitable educational materials,

goals, and some training, they might be more successful as teachers than others. (Vocational education teachers are also presumably very literate.) They would come to such work with greater understanding of and identity with trainees than most professionals--and they would have the great advantage of being engaged in a task in which trainees appear most interested, job performance. As for teaching methods, etc., they might bring to the job as much knowledge about instruction of the disadvantaged as professionals--which may not be saying very much. They might also have the advantage over the counselor of being more likely to <u>decrease dependency</u> in trainees.

Such teachers might also prove to be able counselors and job advisers. Using one person to perform all of these roles also has the advantage of providing better integration and continuity in handling trainees, eliminating role conflicts among staffs and offering a more personal and total relationship to trainees. Such an arrangement might help correct a situation in which trainees, many of whom are said to be adept at adult manipulation, can pit staff members against one another to serve their own ends.

Teaching training: All projects reported the need for better training of teachers. Certified teachers in particular were often found unable to adapt to this special teaching training, along with regular staff meetings in which experiences are exchanged among <u>all</u> staffs.

Many projects report a need for teachers specifically trained in remedial instruction. They report that, for <u>some</u> students, present materials and methods do not seem adequate for literacy instruction. When special impairments are present, reading specialists seem to be required.

Student Population

If projects are to meet student needs, programming must be adjusted to student population characteristics. These populations change constantly. Because of higher employment rates in some areas for males, the projects dealing with young men now increasingly serve young women with dependent children. This change requires that vocational training as well as basic education and counseling be altered to fit new needs.

For example, where the aspirations and educational backgrounds of girls are suitable, typing and secretarial training may fill a number of needs. Such training prepares for decent jobs with upgrading opportunities in an area of labor shortage. It also fills a dual need for vocational and basic education training, since the typist and secretary, as part of their vocation, work with words, printed language, vocabulary, spelling, etc., as well as with oral language. Training is facilitated by the appeal that typewriters and other office machines have for most young people. Similar job training opportunities are not available for boys although experimentation with programs in which boys are taught to use typewriters and other office equipment might prove highly successful in basic education instruction.

A population characteristic receiving special attention in some projects, particularly in Detroit, has to do with health and physical fitness. It has been found that many trainees suffer from some more or less debilitating medical problem. Large numbers are seriously handicapped in their capacity to learn by sight and hearing impairments. Most of these defects are remediable. Not only are complete physical exams and medical diagnoses needed in these training projects, but programs in which medical attention is actively provided to students seem a basic

essential to successful learning and job performance. In many cases, trainee ailments have been previously diagnosed, but trainees or their families have not received proper medical attention. Comprehensive medical attention should be a basic element in all projects.

Related to this are the nutritional needs of trainees and the need for dissemination of birth control information. Large numbers of trainees were reported lethargic and unable to learn because of nutritional deficiencies. Many of them were simply hungry. In no cases did projects provide meals or food. In only a few was there any discussion of the need for birth control information, despite the serious handicap suffered by many female trainees who have repeated out-of-wedlock pregnancies. These problems become more crucial as trainees come increasingly from marginal populations.

Since great variability is found among trainees in performance, background, experience, aspiration and personality maturity--it cannot be assumed that any one approach will work with all students, that any one type of material, instructor, or experience will be most suitable for everyone. Perhaps the most serious deficiency in traditional school programs is that all students are handled in essentially the same way, that they are all required to do the same things and learn the same things, within the same time periods.

An advantage of experimental projects is that allowances can be made for such variation, and programs can be tailor-made to individuals or small groups. In all populations, a normal range will be found for which standardized materials and programs may be effective with only slight variations. Also present will be deviant individuals, often found at opposite ends of the achievement continuum. For these, special tailor-made

instruction will probably be needed. The New York YMCA project found need for at least three levels of materials, roughly 6th to 8th grades, 4th to 6th grades, and below 4th (highly individualized).

Methods of Instruction

Almost all projects tried to integrate basic and vocational instruction. On the whole these efforts were not very successful. The source of this failure seems to be the traditional separation of personnel, programs, and materials in the two areas of instruction. In only a few projects did materials studied in basic education relate at all to what was being done in the shop or on the work site. Typically, vocational teachers focused on manual skills and neglected related instruction in basic education, and basic education teachers seldom had much interest in or knowledge about vocational subjects. Even when vocational and basic education teachers were operating side by side, this separation frequently occurred. Better supervision of these "integration" efforts would undoubtedly help, but they must overcome the obstacles of the traditional barriers existing between trained vocational and basic education teachers. Perhaps the best way to avoid such separation is to have a single person instructing in both areas, using materials developed jointly by creative specialists in the two areas. Reading specialists for those with serious reading problems would, of course, still be needed.

An advantage in teaching job and basic skills together is that for many trainees job skills are interesting and relatively simple and satisfying. Shop work and the learning of manipulative skills can provide exciting

motivation for learning language and computational skills. A student who reads a manual in order to fix a motor is more likely to do the reading voluntarily, appreciate the "uses" of reading, and acquire skills in the process.

In some projects, students were at first grouped homogeneously and treated by the teacher as a traditional class, with all students required to work essentially on the same assignments. Teachers were likely to spend a good deal of time lecturing and explaining, while the class, hopefully, sat and listened. All members of the class worked on the same assignment. In most cases, such methods proved unsatisfactory. Efforts were then made to individualize instruction, minimize the role of teacher as lecturer and expert, and maximize the individual student's own initiative and pacing. Sometimes students would be divided into small groups, but rarely did they meet as a large body.

Guest speakers, visits to job sites, community field trips, and the use of learning "games" were among the more successful related activities. Very little use was made of role playing or simulation. Field trips were rather sparse considering the popularity and usefulness of such activities.

Materials of Instruction

As previously noted, a chief area of innovation was in the development and use of new materials. Until recently primary reading materials suitable for adult readers have not been available. This deficit is now being corrected and many new materials are in use. The E & D projects were perhaps not the first to use such materials, but they were certainly far in advance of the schools in efforts to find and create suitable materials.

Three major types of instructional materials were used in these projects: (1) structured materials; these included new texts, individualized programmed materials, games, etc,; (2) unstructured materials; these consisted mainly of libraries of paperback books of special interest to trainees, offered as free reading; (3) audio-visual materials.

Neither of the two major electronic "instructional" devices were used--neither television nor computers. Some of the materials used will be described in Part V of this document. Experiences with materials were often contradictory. Some users were satisfied with specific materials, and others were equally dissatisfied. Surprisingly, by the time of this retrieval effort, most projects had found some more-or-less satisfactory materials, and complaints were infrequent about the lack of instructional materials.

Incentives and Motivation

Neighborhood Youth Corps and similar programs seem to be demonstrating that money is a meaningful incentive for disadvantaged students, as we might have guessed to begin with. When trainees are paid, especially if they are paid well, they tend to accept the requirements of the training program, even its basic education component. Almost all projects stressed the need to pay trainees throughout the training and education period.

The need for large expenditures on student stipends would be eliminated it training were done on the job, to improve skills of regular work done by trainees for pay. Since student motivation is largly job-and-money centered, the job setting itself would seem to be the best place for training, education, and rehabilitation.

This is not to say that non-monetary incentives cannot be used or are not naturally operative with trainees in institutional programs. One

quite potent and underestimated motive is the desire of most students to learn to read, write, and perform well. Many students have much natural curiosity which can serve as a stimulant to learning when it is not repressed by fear of failure or embarrassment.

Specific job requirements as well as skills required for job-upgrading can also be powerful incentives to learning, but these goals should be highly visible and immediate.

Individual competition and incentives commonly used in traditional education may have a negative effect on trainees unless used with discretion. Typically, these trainees seem reluctant to compete with others, and, on the contrary, often have strong drives toward group cohesion and solidarity--drives which can be used for very positive ends in training.

Class Size

In some projects, where the public schools operated the basic education component, it was reported that the schools required a minimum class size of 15. In most projects, classes were smaller than this, some rather too small for good interaction. Small group techniques, useful for therapeutic or instructional purposes, were rarely employed.

The small size of both classes and total enrollment appeared as a distinct advantage for many trainees who function best in small and informal settings. Certainly the small size of most of these programs contributed to the high staff morale and the esprit de corps found in many projects. Both staff and trainees seemed inclined to regard the projects as a "home" rather thatn an "institutional setting."

Physical Setting and Facilities

The physical settings of classrooms tended to be informal and non-institutional. Many of the buildings, however, were rather dirty, poorly

maintained, stark and unattractive. In upgrading standards for disadvantaged youth, facilities that are casual and informal--yet at the same time orderly, clean and attractive--should be provided.

In at least one project basic education classes were held in a building located on public school property and adjacent to an elementary school. Students seemed displeased with this arrangement since it remined them of the "inhospitable" school setting. In one project a house was taken over, a lounge provided, and other rooms converted into classrooms--an arrangement reported to be very satisfactory to students.

Many projects report that a number of trainees need residential facilities a substitute home in which they can sleep, eat, and study. Since many youths obviously cannot function adequately in their present home environment, it would seem highly desirable to provide such facilities where needed.

Time

Reported experiences about time and duration of projects and basic education components were conflicting. In some projects it was felt that the training period was too long and that trainees became bored; in others it was felt that the time was too short to raise skills significantly.

The most ideal basic education programs, of course, are those that aim at continuous upgrading of trainees throughout their working lives--that offer opportunities for continuous on-the-job education and stipends for education obtained elsewhere.

Some projects scheduled basic education for the morning, others for the afternoon. If a division must be made between education and training, it would seem highly desirable to schedule education classes for the

morning when trainees are fresher, or at least to alternate sections. Ideally, however, basic education and training would be a continuous process, and education would be intimately related to the acquisition of job skills and interspersed with such training throughout the day.

Coordination and Structure

In most projects the central coordination and structure were very loose. As projects matured, and as staff feld the need for a body of rules and regulations and guidelines for program development, structure usually began to develop. In most projects a loose structure provided staff opportunities to be creative in problem solving. In other projects, staff was confused by lack of firm guidelines and direction.

A related matter was the conflict in some projects over "limits" to be set for trainees. Generally, consuelors favored a more permissive approach to trainee behavior and greater acceptance of rule violations. Job Placement staff tended to be at the other extreme, insisting on high standards of performance for students and the imposition of rules and regulations that would make trainee performance acceptable to employers. Conflict among staff on this issue, it was reported, reduced the efficiency of the training and gave trainees opportunities to exploit the division of authority and play staff against each other. Increasingly the conflict appears to be resolved in favor of those who favor stricter rules and greater structure. Perhaps such conflict and confusion would be avoided if one person were responsible for both counseling and job placement.

Communications

In most projects it was felt that better communications among E & D Projects were very much needed and that opportunities should be offered for visits and exchanges among project staff. It was clear in basic education, for example, that projects were not aware of what other, groping with similar problems, were doing about materials, methods of instruction, etc. It would seem that such feed back and retrieval should be a continuous process in such experimental project.

Impact on Educational Institutions

It is extremely difficult to comment on, or measure in any way, the impact of these programs on the public schools. Such an analysis would require a much more intensive investigation than could be attempted here. In smaller communities such as New Haven, and even in one such as Syracuse, impact on the schools may be significant. In the big cities, however, there are few indications that innovations promoted by these projects have had a noteable influence on the schools. In the Mobilization for Youth project in New York, for example, many joint activities were conducted by the public schools and Mobilization, but when these projects came under the exclusive management of the schools, they tended to be reduced in size or abandoned altogether. In Detroit, on the other hand, some impact was reported.

The public schools, an institution perhaps more resistant to change than any other, may be vulnerable to change only when monetary incentives are offered (as in federal aid programs), or when massive and specific efforts are made to introduce change (as in the new math and science curriculums)--or when agencies trying to promote change are in powerful and competitive positions. The Youth and Work programs were apparently not in that position. The only basis for their influence, therefore, would have been the inherent

merits of the experimental elements introduced. It has been repeatedly shown, however, that schools do not respond to new programs simply because they seem to be better that the old ones.

The social institution that is in the best position to offer healty competition to public schools is "business and industry". Education programs are extensive throughout American industry. Some industries, such as electronics and aorospace, sponsor advanced programs for the educational development of employees. Industrial programs need to be examined more carefully by those who wish to provide alternative educational paths for youths who are dissatisfied with the public schools.

Education and training conducted by business and industry has the additional advantage of being able to circumvent public schools and state departments of education in selection of teachers. New types of personnel can be chosen and attractive and permanent positions can be offered to the staff employed.

IV FURTHER CONCLUSIONS AND RECOMMENDATIONS

Some of these notes repeat what has been said in other sections; some are based on my <u>own</u> judgments derived from analysis of E & D experiences. None of these conclusions are final; they are simply working hypotheses, based on what I regard as the best available evidence, for further experimentation and demonstration.

(1) Since health and nutritional needs take precedence over other needs and are basic essentials to learning and effective job performance, physical exams and appropriate medical attention should be required of trainees, as in the military. In particular, all hearing and sight impairments should receive prompt attention.

Where possible a nutritional meal or snack should be served trainees during training periods in order to provide: (a) nutrition and energy fuel to trainees, many of whom seem seriously undernourished; (b) motivation for attendance and performance; (c) pleasant associations and responses of trainees to basic education instruction.

(2) Where possible all training and basic education should be done <u>on-the-job</u>. This would: (a) satisfy the trainees' most basic need and desire for a paying job; (b) provide realistic and immediate motivation to trainees to improve basic education skills: (c) make it possible for basic education to be more closely integrated with job training and performance; (d) provide a "status" setting for education to take place (traditional classrooms having generally low status); (e) make it possible to circumvent limitations put on staff hiring and curriculum by school authorities; (f) provide a more permanent and more appropriately qualified pool of instructors from among employer's staff; (g) build the potential of employers to engage in education and training, and set up programs which offer serious competition to the public schools, thus helping them, through

healthy competition, to improve their efficiency.

It is widely felt that the greatest incentive to change in educational institutions would be the introduction of competition from other institutions. The aim of E & D projects is not to conduct fragmented experiments but to influence major institutions in the society. Few significant changes in public schools were, in fact, brought about by E & D projects. A better strategy for bringing about such change might lie in setting up major educational programs--based on integration with job performance and a clear ladder of job upgrading--in the most powerful sector of American society, business and industry, where the potential is present for meaningful competition with educational institutions. What must be given careful consideration in such programs is the matter of control. Programs might require participation in administration by any or all of these interested groups: employer, government funding agency, union, representatives of the disadvantaged (as trainee, community councils, poverty boards).

Significantly, at least two projects among those visited are now pioneering in efforts to develop innovative and large-scale on-the-job programs--Chicago JOBS NOW, and New York YMCA. The development of these programs will deserve careful attention.

(3) Where on-the-job training and education are not possible, trainees should, where possible, be paid for attending classes.

(4) Instructors should, where possible, work with small numbers of trainees and experimental efforts made to enlist various types of personnel, especially tradesmen, in performing many roles, perhaps including instruction in work skills, work supervision, needed basic education instruction, and counseling. Such an instructor might fill: (a) the need of most trainees to form a close and complete relationship with one interested

adult; (b) the need to closely integrate basic education with all other aspects of the trainee's development, inclusing vocational and personal development. Because of the specialization of various professionals roles, in almost none of the E & D projects was such integration achieved.

(5) Staff should be chosen on the basis of ability to relate to trainees and perform the required job. No academic or experience qualifications should be applied. The only test of fitness should be performance and ability to handle the job.

(6) As much as possible, students should be used to instruct one another, formally and informally, as a supplement to the work of teachers.

(7) Materials need to be more carefully evaluated for effectiveness.* Especially in job training, the interest generated by free reading of paperbacks, magazines, newspapers should not be neglected. Learning in connection with job training can become too automated and mechanical. The most certain road to continuing educational development is an interest in reading as pleasure and the development of a reading habit.

(8) Very few programs offer adequate opportunity to explore the world of work. Part of this exploration can take place in job training.

(9) Even the best program, with the best instructors, under the most ideal conditions will not "work" with all trainees. The mistake made in public schools of standardizing education for all or most students should be avoided. Suitable options should be available for trainees who do not fit the standard program.

(10) The subject of birth control information should be explored with trainees.

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* Greenleigh Associates found that using three types of teachers (certified, college grad, high school grad) and four types of programs (SRA, Mott, AIR, Follett), only instructors made a difference to student performance. High school graduates were more successful teachers than others. A majority of the high school grads (like the students but unlike other types of teachers) were Negro.

(11) Education and training goals should be clearly stated and understood--realistic, and both immediate and long-term.

(12) Better communication among projects is needed as well as more expert consultation.

(13) E & D projects should operate in close coordination with, but autonomous of, other larger institutions or ogranizations.

(14) Much more "lead time" should be given all projects, especially since adequate staff training seems so critical to the success of these programs.

(15) More residential centers are required.

(16) Buildings and classrooms should be attractive and well cared for.

(17) As much as possible, trainees should be involved in action and participatory learning.

(18) Better and more highly structure systems of <u>accountability</u> should be worked out for these projects.

V SUMMARY OF BASIC EDUCATION MATERIALS

This section contains five parts:

(1) A summary of materials used in E & D project.

(2) An example of classes and materials used in one E & D project--Lane County, Oregon. This section lists the classes in basic education offered, materials used for specific purposes and the publishers of these materials.

(3) An evaluated list of materials used by the PAL-JOEY project in New York City. This part contains two lists (A & B), annotated by comments on the applicability of these materials in the PAL-JOEY project, and comments on their effectiveness.

(4) A listing of materials used by the Chicago JOBS project, with descriptings and comments.

Materials Used in E & D Projects:

The types of written materials used in basic education E & D courses include:

(a) Descriptive books or booklets (such as simple guides to do-it-yourself projects)

(b) Imaginative books or booklets (such as Reader's Digest materials, stories, biographies, etc.)

(c) Programmed materials

(d) Work books of several forms -- one volume with hard or soft cover, several booklets, numerous detached articles or exercises through which the student progresses. These may contain various content -- technical or manual skills, stories, English grammar and usage, social studies.

Bibliography of Materials Used (with annotations and evaluations where available)

(1) SRA, Reading in High Gear, the accelerated progressive choice reading programs, Myron Woolman, SRA, Inc., 259 East Erie St., Chicago, Ill.

SRA was used in a number of projects with mixed results. In Richmond the series was found satisfactory; in Chicago boring to students. Richmond found it useful in preparation for exams. Mobilization in New York is using it exclusively. This SRA series contains a series of workbooks, divided into three cycles. Students work out answers in the workbook. Instructor's manual accompanies each workbook.

(2) Basic Systems, Inc., Human Resources Division, Manpower and Community Development, 880 Third Avenue, New York City 22

A large number of workbooks were developed by Basic Systems for the New York YMCA Youth and Work Project in four areas: Remedial reading, remedial math, machine shop practice, auto mechanics. These were tailor-made for the project and aimed at integration of basic and vocational education. Those working with the materials said they could not provide the whole substance of a basic education program but must be used with supplementary materials and varied teaching methods. The materials are in the public domain and can be used and duplicated by anyone. Only the workbooks on fractions in the remedial math section were reported inadequate. Materials are designed to reach trainees at 4th, 5th, and 6th grade levels and bring them to 7th and 8th grade levels. Pre and post tests are available.

(3) Follett Publishing Co. materials, 1010 W. Washington Blvd. Chicago, Illinois.

Follett provides two catelogs of basic education materials for adults and young adults. One catalog describes programs in reading, writing, spelling, English, and arithmetic. The other describes "supplementary" materials: 13 "provided programs" in American Heritage, Vocational Training, Understanding the Automobile, etc.

Follett's three basic reading and writing programs are: "Reading for a Purpose" (sight-word approach, 50 looseleaf lessons, enables pacing for individual achievement); "Systems for Success I-II" (phonetic approach to building skills; each lesson develops a vocabulary, grouping phonetic families); "Communications I-II-III" (linguistic approach, three books of applied linguistics; writing accompanies reading.

(4) High School Equivalency, Arco Publishing Co., Inc., 219 Park Avenue S., New York City

Arco puts out two large and attractive paperbound books, one for preliminary work, "Preliminary Practice for the High School Equivalency Diploma Test"; and one for advanced work, "Equivalency Diploma Tests" which contains material on the exact level of the test. These materials, preparing trainees for the G.E.D. (General Education Development test) have been widely and successfully used in many projects. In some, as in Eugene, Oregon, staff prepared dittoed materials--similar to the exercises contained in these two volumes--for trainees.

Arco Course for post office clerk, carries, Arco Publishing Co. This material was found very useful in Richmond, Chicago and elsewhere in preparation for specific civil service jobs.

(5) Words in Color, Caleb Gattegno, Encyclopedia Britannica Press.

Generally found effective in teaching those with severe literacy problems; limited use with those above 4th grade level. Some found rather too young for use with trainees. Because of essentially creative approach, book offers teacher opportunities to stimulate and innovate.

(6) Educational Development Laboratories (EDL), Huntington, Long Island

Tach-X, a tachistoscopic machine whose purpose is to develop greater mental and visual acuity; uses filmstrips on number recognition, vocabulary, spelling.

(7) Reader's Digest Service: Reading Skill Builders, Reader's Digest Services, Inc., Educational Division, Pleasantville, New York.

Skill builders contain graded reading materials, stories and articles with illustrations.

(8) Mott Basic Language Skills Program, Allied Education Council, 5533 Woodlawn Avenue, Chicago, Ill.

Trainees progress through series: 200 A & B; 600 A & B; 900

(9) Language Master Program, Bell & Howell Corporation

Record playback machine with a two track system so that trainee may mimic the voice of instructor and listen to the comparison. Useful in improving diction of trainees, correcting speech defects, and improving vocabulary and language usage. Chicago developed its own vocabulary as the needs of trainees dictated.

(10) Programmed Math, McGraw Hill and Sullivan Associates, Palo Alto, Box 577, California

(11) English 220, a programmed course in grammar and usage, Joseph C. Blumenthal, Harcourt, Brace & World, 1855 Rollins Road, Burlingame, Calif.

Available in hard cover and paperback. A separate 64 page booklet is provided for testing students. The volume contains 11 units and 78 lessons, deals with basic aspects of the sentence: parts of speech, punctuation, capitalization, Covers 7th and 8th grade materials.

English 2600, covers 9th and 10th grades

English 3200, covers 11th and 12th grades

(12) TEMAC, Grolier Society, programmed material, used in PAL

(13) Discovering Your Language, Neil Postman and others, Holt, Rinehard & Winston, Inc., New York City. Employs linguistics and uses the "inductive" approach to teaching language. Series contains a number of hard-cover test-like volumes with numerous exercises for student use. They are not programmed.

Said by some to be very useful, but difficult for traditional teachers to handle. Still in experimental stages.

(14) ITA Alphabet, phonemic alphabet; used at entry level up to 4.2 level at end of Book 6; Book 7 is enrichment. Not good for adults.

(15) Spanish-speaking materials.*

In Chicago JOBS, one Spanish instructor prepared a course of mimeographed materials for use in building English vocabulary. Word drills and paragraphs containing vocabulary words are offered, in both English and Spanish.

(16) Federal Department Stories, training manuals, Personnel Office, Federal Department Stores, Inc., Detroit, Michigan

(17) Hooked on Books, Morton Shaevitz and Daniel N. Fader, University of Michigan Press.

Though it had not been used in Detroit, it was conceived of as an excellent approach to teaching basic education through free reading in creative literature, stories, biographies, etc.

(18) Addison-Wesley. Math instruction; used in MFY project

(19) Outline of course for dialect remediation among girls, Center for Community Studies, Temple University, Philadelphia, Pa.

(20) Material on Negro history and cultural background of Mexico, developed by YTEP, East Los Angeles project

(21) How to Read Better, Steck-Vaughn Co., Austin, Texas; series for adults; reported to be cheap and good.

(22) Vocational materials, developed by companies such as Philco and Brass Raid for specific job training.

(23) Working with Numbers, Steck-Vaughn Co., Austin, Texas, individualized instruction

(24) 30 Days to a More Powerful Vocabulary; used in Chicago

(25) Twenty Steps to Perfect Spelling, used in Chicago

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* Resource Units in the Teaching of Occupations, An Experiment in Guidance of Puerto Rican Teen Agers, Bd.of Education, New York City. Also useful.

Examples of Materials Used in E & D Projects
Lane County, Eugene, Oregon

Class	Textbook	Publisher
Spoken English	A.L.M.	Own dialog
Reading		
1	I.T.A.	I.T.A.,Inc., New York
2	SRA, Cycle I, Seg. 106	SRA
3	Readers Digest Skill Builder	Readers Digest
4	Reading for a Purpose	Follett
Writing		
1	ITA (printing)	ITA
2	SRA Cycle II Seg. 5	SRA
3	Noble's Book 3	Calif. State Dept.
Basic Education		
English	Systems for Success I	Follett
Social Studies	Outline Maps	Continental Press
Science	Teacher made materials	
Literature	Reader's Digest	Reader's Digest
Math	Programmed Math	McGraw Hill
	Modern Practices 4-5	Steck-Vaughn Co.
	Figure It Out	Follett
Intermediate Education		
English	Be a Better Reader	Prentice Hall
	English 2200 & 2600	Harcourt, Brace & World
	Systems for Success II	Follett
	Introductory Geography	Holt, Rinehart & Winston
	Map Outlines	Continental Press
	Be a Better Reader R-I	Prentice-Hall
	Adventures Ahead	Harcourt, Brace
	Adventures for You	Harcourt, Brace
	Practice Exercises	Continental Press
	Modern Practices 5-6-7	Steck-Vaughn
G.E.D.		
English	Be a Better Reader II	Prentice Hall
	English 2200 & 2600	Harcourt, Brace
	Systems for Success II	Follett
Social Studies	Introduction to Geography	Holt, Rinehard
	Students Political Atlas, World	Rand McNally
Science	Science	Holt, Rinehart
Literature	Adventures Ahead	Harcourt, Brace
	Adventures for You	Harcourt, Brace
Math	Modern Practices 7-8 & Gen. Math	Steck-Vaughn
	Systems for Success	Follett

Other materials used: Lane County, Oregon

I Want to Read and Write	Steck-Vaughn Co.
Working with Numbers	"
I Want to Learn English	"
Learning and Writing English	"
Steps to Learning	"
Understanding the Automobile	Follett
New Worlds of Literature, Halliburton	Harcourt, Brace
High School Equivalency Text Manuals	Arco Publishing Co.
Mott Series: 300A, 300B, Word Banks, Numbers and Money, 600 A & B, 900 A & B	Mott Basic Language Skills Program
AR-1501 Teaching Adults to Read	
AR-1502 Keys to Basic Language	

Notes from Chicago JOBS on materials used:

I. Published Materials

A. Words in Color by Caleb Gattegno (Encyclopedia Britannica Press)

This essentially linguistic approach to the teaching of reading and writing has demonstrated itself to be quite helpful in teaching those trainees with severe literacy problems. For trainees whose reading achievement levels are above the fourth grade level, we have found W.I.C. to be of limited use. Employing a game-playing, creative approach to learn, W.I.C. tends to get the trainee involved in the process of learning to read and helps to break down ingrained hostilities and failure symptoms which are frequently present in trainees coming from unsuccessful school experiences. An added advantage is the concurrent learning of writing. From observing some of our classes that use W.I.C., we have found that trainees can often attack advanced vocabulary without difficulty. Because of its essentially creative approach, W.I.C. offers the teacher almost endless opportunities to stimulate and innovate. Our experience indicates, however, that the very nature of this approach often poses difficulties for the traditional teacher. Our greatest success with these materials has been with younger teachers or with group workers who have not been bound by traditional teaching methodologies.

Also important to note is the fact that Encyclopedia Press has been most cooperative in offering the services of consultants and in-service training personnel. The necessity for this cooperation when instituting newer educational approaches cannot be emphasized enough. One side effect of the W.I.C. which we have not exploited enough to comment on with assurance is the use of these materials in teaching better diction and speech.

Summary: Words in Color is useful for true remedial reading cases. For optimum success it requires a teacher who has a creative sense and can be reasonably imaginative and free-whelling in developing its use with trainees. It can, in remedial cases, encourage progress in reading, writing and speech.

B. Educational Developmental Laboratories (EDL) Huntington, Long Island

EDL is programmed instruction in reading, arithmetic, spelling, vocabulary and typing. It may be used with either individuals or with small groups. The heart of this programmed instruction is film strips projected through special projectors which scan from left to right, which develop proper eye movement at the same time as it develops reading and arithmetic skills.

1. Reading. The reading program center on word attack skills, comprehension, and reading rate. Both vocabulary and stories are presented on film strips. Reading speed may be increased gradually during the projection of a story. Comprehension tests accompany the program so that trainees may have sense of immediate progress and teachers may have almost immediate evaluation of this progress. Although preparatory, printed materials are available to accompany the film strips, we have generally found the EDL program works better when the preparation is conducted through the interaction

of teacher and trainees. To some extent this is also true in terms of tests and evaluations following the reading experience. Level of stories runs from first through twelfth grade. At the lower grade levels EDL has developed enough stories of substantive content so that trainee interst is maintained, though even here, as in so many other literacy materials, we would hope for more film strips of adult content.

2. Math. The EDL math program includes drill in arithmetic operations, in development of knowledge of general business mathematics, and in development of trainee ability to read and think out word problems. For this latter the left to right scanning techniques is used, thus reenforcing the development of the proper eye movement. One of the advantages of the EDL math program is the game-playing technique which is implicit in the method of the program.

3. Spelling and Vocabulary. EDL utilizes tachistoscopic techniques in improving trainees' vocabulary and spelling. Again, there is an implicit game-playing methodology in the program.

Summary: The main advantages of the EDL program is the implicit game-playing technique, a program device which can be used with small groups, and a process through which trainee can feel immediate success and have evaluation of his progress. Though story content, in some cases, is good, adult content stories are generally lacking for lower achievement levels. The reading program concentrates on reading for meaning. Use of projector does not hinder trainee-teacher interaction. The problem with EDL is to get teachers to feel adequate in the use of machines and programmatic style. EDL should be used in concurrence with other reading materials. It appears to have limited effect on difficult, remedial cases, suggest utilizing as few of the preparatory materials as possible.

4. EDL Typing Program. Utilizing similar techniques as the EDL projected reading program and presenting a different approach to learning the keyboard, the EDL typing program can, in fact, take a non-typist with average digital dexterity and develop in them a typing skill of approximately 45 words per minute in a period of about 20-30 weeks (with approximately one hour of EDL instruction per day). The EDL typing program is specifically a skill building program. Its greatest advantage is that it cuts down on the amount of time it takes to develop the basic skills of typing itself, thereby providing far more time for instruction in those tasks necessary to be a good clerk typist or secretary. Again, the instructor must be well acquainted with the techniques of the program in order that it may be useful. If such an instructor is available, we believe this to be one of the more successful typing programs.

C. Lanugage Master (Bell & Howell Corp.) The Language Master is a tape recording device which utilized 4" x 8" cards on which an instructor's voice can be set and on which a trainee's voice may be recorded and re-recorded. On the face of the card may be put pictures, words, phrases, sentences, definitions, etc. The purpose of the Language Master program is three-fold: to improve vocabulary, spelling, diction, and in some cases, word attack skills. In the JOBS II Project we have worked from blank cards, developing

our own vocabulary as the needs of trainees dictate. Essentially, the Language Master is a drill program, but out experience suggests that trainees maintain a fairly high interest level over a long duration when using this machine.

D. Curriculum Resources, Inc. (Scott, Foresman & Co.)
During the course of JOBS II Project we have used two booklets published by CRI--"Patterns of Economic Growth: The American Economic System" which deals at the fifth grade reading level with a substantive approach to the American economic system and "Our Labor Force" which discusses at the sixth grading reading level the structure and function of the American labor force and the development of unions and management. These booklets were introduced into training in order to give the trainee an adult, knowledgeable view of the working workd for which he was preparing. The two booklets are among the few published materials which present adult content at lower grade reading levels. As hoped for, trainee reactions were generally enthusiastic. One other of these booklets, "World Trade", written at the fourth grade level, might be useful to literacy training projects. The other booklets in the CRI series -- "Studies in Economic Issues" -- are written at the high school level but might be useful to more advanced trainees: thay are "Capitalism, Communism, Socialism", "Understanding Economic Growth", and "Economics of the Community".

E. The Reader's Digest. There are two main advantages to utilizing the "Reader's Digest" Educational Edition--in training programs such as JOBS. The first is the variet of adult content available; the second is the availability of such content at various grade levels when necessary.

F. Cuisenaire Rods and The New Math Workshop (Encyclopedia Britannica Press) These are new game-playing creative approaches to the teaching of basic arithmetic and mathematics. Our experience with them has not been prolonged enough to allow a sound evaluation. It appears at this point that with proper planning and use, they may provide certain kinds of shortcuts in teaching arithmetic and mathematical concepts.

G. Games. JOBS II Project has utilized board and manipulative games both for their own sake and as a basis for unit development. Some which we have found particularly useful are: "Scrabble," "Word Golf," "Lexicon," "Password," "Probe," "Politics," "Rich Uncle," "Careers," "Finance" and "Clue." Most of these are produced by Parker Bros. Manipulative games of some value include: "The Chinese Tangram," "Yankee Square," and the "Hindu Pyramid," available from the World Wide Game Co., Delaware, Ohio.

H. Miscellaneous. In addition to these specific materials mentioned above, JOBS has used newspapers, magazines, free pamphlets, material from banks, companies, etc., various business forms, job applications, etc. In some units recordings--sound effects, music and spoken word--have been programmed with considerable success. Text books dealing specifically with business, clerical, and other vocational skills are standardly employed in our vocational training units, and in the pre-vocational classes in our basic education units. We have also been able to occasionally utilize more standard materials in reading, social studies, and arithmetic.

II. Unpublished Materials

A. Negro History. One of the teachers is the Project prepared (during the initial week of the program) a fairly thorough syllabus of Negro History. It is presently being edited for distribution to interested persons. Other social studies teachers in the Project have been developing similar syllabi for their own use in the training facility. Examination of these syllabi show a high degree of creative thought in presenting Negro history meaningfully to our trainees (the bulk of them are Negro), and in placing this history in its proper perspective within American history. The development of this course of social studies in our program seems to have had an excellent effect on the personal growth of the trainees.

B. Employment. Most units have prepared their own materials of instruction relating directly to the world of employment. In some cases this deals with a programmed use of business forms and applications. In others it deals with the development of company histories designed to give the trainee a clear picture of the interrelationships of the labor force and of business and industry within his community.

C. Consumer Economics and Personal Finance. Arthmetic teachers have developed various kinds of materials which have encouraged the trainee to bring his finances under better control and which provide him with a realistic orientation towards consumer economics. From these materials he also learnes credit and loan functions. He learns the concepts of interest and also the functions of percentages and fractions. In our clerical-duplicating training unit one vocational instructor has developed a sound program for teaching the arithmetic of postage and mail handling.

D. Games and Problems. As a result of our emphasis upon specific educational approaches and of encouraging a spirit of innovation, many of our teachers have either collated or developed a wide variety of games and problems which can provide stimulus and learning for the trainees.

III. Materials of Limited Use. Partly by choice and partly by experience, the JOBS II Project staff has tended to stay away from traditional work-books, textbooks, and school-related materials. For those with genuine literacy problems, the content of low grade level readers is puerile, and in most cases, material traditionally oriented in formate arouses hostilities in the trainees. We have sometimes found that even the most phonetic approaches to the teaching of reading throws blocks in front of the trainees' learning. Because of the group orientation of most of the trainees, we have found that such materials as the SRA Reading Laboratories and programmed self-instructional materials are of limited use; firstly, because they are so highly individual and, secondly, because they are not so activily oriented as they sometimes appear.

Summary: Even though JOBS II Project utilized published materials, it should be apparent from the foregoing that these are thoroughly integrated with a variety of materials which would not oridnarily be used in traditional teaching programs. More than any materials, a dependence upon a teacher's sense of ingenuity is encouraged, recognizing that no one program or text is adequate to the task at hand. We cannot exphasize too strongly that it is this ingenuity, when approaching whatever materials are available, which we feel crucial to training success. On the other hand, our experience indicates that some of the new approaches to literacy that are being prepared by

various companies can have real value to training programs such as ours, but only as consultant services and in-service training personnel are also made available with these materials.

New York City
Pal-Joey Project — Instructional Materials
(This is an annotated and evaluated list only of materials that came to the attention of the Pal-Joey Project)

Title	Description	Grade Level Interest	Reading	Applicability non	limited	extensive
SRA, Reading Lab Kit 111A	self-administering and self-scoring reading exercises	7-8	3-12			x
Rochester Series, SRA	readers and worksbooks					x
Basic Reading series, SRA	beginning basal reading series, linguistic	1-6	1-6		x	
Reading in High Gear, SRA	Beginning reading system		1-6			x
Open Court Publishing Co. Open Court Reading Prog.	basal reading system using multi-sensory approach	1-6	1-6		x	
Scott Foresman, Basic Readers (Curriculum Foundation Reading Program)	Basal reading system readers and workbooks	1-6	1-6		x	
McGraw-Hill, Webster Div. Reading Books.	programmed beginning reading system, workbooks	1-6	1-6			x
Reader's Digest Service; reading skill builders	readers and exercise books	8-12 & adult	1-8			x
Follett, System for Success	beginning remedial reading system for adults; exerc. bks.	8-12 & adult	1-6		x	
Skill Centers, Inc., and Here-by Hangs a Tale	supplementary readers	1-8				x
Finic, Finding Your Job	job description reading material					x
Lawson & Co., Everyday Reading	workbooks	Jr. High School				x
Teacher Materials Corp. (Grolier)	programmed reading, spelling & punctuation materials					x

Title	Description	Grade Interest	Level Reading	Applicability non	limited	extensive
Turner-Livingston	workbooks written specifically for New York City school population					x
Columbia University (T.C.) Bureau of Publications, McCall-Crabb Standard lessons in reading	exercise books, grades 3-12	3-12	3-12			x
Gates-Peorday Reading exercises	exercise books, grades 1-6	1-6	1-6			x
Barnell-Loft, Specific Skill Builders	exercise books, each book dealing with one specific skill	1-6	1-6			x
Pitman (i/t/a)	initial teaching alphabet. A phonetically consistent alphabet with accompanying materials for beginner reading	1-6	1-6			x
Mathematics						
Teaching Material Corp. (Grolier)	programmed materials in addition, subtraction, multiplication & division, decimals & fractions, algebra, modern math					x
Follett Publishing Co., Figure It Out	workbooks		x			
Scott-Foresman, Seeing Through Arithmetic	elementary school text series		x*			
SRA, Computational Kit	practice exercises in computation skills					x
Encyclopedia Britannica Press, Discovery in Elementary Math	suggested materials & approaches, Teacher's Manual					x*
World Book Co., Growth in Arithmetic	Suggested materials & approaches, Teacher's Manual		x*			
World Bk., Discovery of Meaning in Elem. Math	Elementary		x*			
Audio-Visual Aids						
Occupational Films	Occupation descriptions		x			

*for staff use